AMENDMENT

Please amend the claims as follows:

This listing of claims will replace all prior versions, and listing, of claims in the application:

Please cancel claims 30, 36 and 37, without prejudice.

Listing of Claims:

Claims 1 to 20 (canceled)

Claim 21 (previously presented): An oligonucleotide probe consisting of about 15 to 50 contiguous nucleotides of a polynucleotide having a sequence as set forth in SEQ ID NO:23, or a sequence complementary thereto.

Claims 22 to 25 (canceled)

Claim 26 (currently amended): An oligonucleotide probe at least 30 nucleotides in length comprising a nucleic acid sequence which hybridizes to a nucleic acid comprising SEQ ID NO:23 or a sequence fully complementary thereto to form a detectable target probe duplex, wherein SEQ ID NO:23 encodes a polypeptide having esterase activity and hybridization conditions comprise 45°C in 0.9 M NaCl, 50 mM NaH_2PO_4, pH 7.0, 5.0 mM Na_2EDTA, 0.5% SDS, 10X Denhardt's, and 0.5 mg/mL polyriboadenylic acid and a wash step comprising 30 minutes at room temperature in a buffer comprising 150 mM NaCl, 20 mM Tris hydrochloride, pH 7.8, 1 mM Na_2EDTA, 0.5% SDS, followed by a 30 minute wash in the buffer.

Claim 27 (currently amended): An oligonucleotide probe at least 30 nucleotides in length comprising a nucleic acid sequence which hybridizes to a nucleic acid having at least 95% identity to SEQ ID NO:23 ~~and encoding a polypeptide having esterase activity~~ or a sequence fully complementary thereto to form a detectable target probe duplex, wherein the nucleic acid having at least 95% identity to SEQ ID NO:23 encodes a polypeptide having esterase activity and hybridization condition comprise 45°C in 0.9 M NaCl, 50 mM NaH_2PO_4,

pH 7.0, 5.0 mM Na_2EDTA, 0.5% SDS, 10X Denhardt's, and 0.5 mg/mL polyriboadenylic and a wash step comprising 30 minutes at room temperature in a buffer comprising 150 mM NaCl, 20 mM Tris hydrochloride, pH 7.8, 1 mM Na_2EDTA, 0.5% SDS, followed by a 30 minute wash in the buffer.

Claim 28 (currently amended): The oligonucleotide probe of claims 26 or 27, wherein the sequence is at least [[15]] 50 bases.

Claim 29 (previously presented): The oligonucleotide probe of claims 26 or 27, wherein the sequence comprises SEQ ID NO:23 or a sequence complementary thereto ~~is at least 30 bases~~.

Claim 30 (canceled)

Claim 31 (currently amended): An [[The]] oligonucleotide probe ~~of claims 21, 26, or 27, wherein the probe is~~ consisting of about 20-50 contiguous nucleotides [[in length]] of a polynucleotide having a sequence as set forth in SEQ ID NO:23, or a sequence complementary thereto.

Claim 32 (currently amended) A composition comprising an [[The]] oligonucleotide probe consisting of the oligonucleotide probe of claims 21, 26, or 27, ~~wherein the probe further comprises~~ and a detectable label.

Claim 33 (previously presented) The oligonucleotide probe of claim 32, wherein the detectable label comprises an isotopic label or a non-isotopic label, which non-isotopic label is selected from the group consisting of: a fluorescent molecule, a chemiluminescent molecule, an enzyme, a cofactor, an enzyme substrate, and a hapten.

Claim 34 (currently amended) An oligonucleotide probe at least 30 nucleotides in length consisting of a sequence which hybridizes to a nucleic acid comprising SEQ ID NO:23 or a sequence fully complementary thereto, to form a detectable target probe duplex, wherein the nucleic acid encodes a polypeptide having esterase activity and hybridization condition comprise 45°C in 0.9 M NaCl, 50 mM NaH_2PO_4, pH 7.0, 5.0 mM Na_2EDTA, 0.5% SDS, 10X Denhardt's, and 0.5 mg/mL polyriboadenylic acid and a wash step comprising 30 minutes at room temperature in a buffer comprising 150 mM NaCl, 20 mM Tris hydrochloride, pH 7.8, 1 mM Na_2EDTA, 0.5% SDS, followed by a 30 minute wash in the buffer.

Claim 35 (currently amended) An oligonucleotide probe at least 30 nucleotides in length consisting of a sequence which hybridizes to a nucleic acid having at least 95% identity to SEQ ID NO:23 and encoding a polypeptide having esterase activity or a sequence fully complementary thereto to form a detectable target probe duplex, wherein the nucleic acid having at least 95% identity to SEQ ID NO:23 encodes a polypeptide having esterase activity and hybridization conditions comprise 45°C in 0.9 M NaCl, 50 mM NaH_2PO_4, pH 7.0, 5.0 mM Na_2EDTA, 0.5% SDS, 10X Denhardt's, and 0.5 mg/mL polyriboadenylic acid and a wash step comprising 30 minutes at room temperature in a buffer comprising 150 mM NaCl, 20 mM Tris hydrochloride, pH 7.8, 1 mM Na_2EDTA, 0.5% SDS, followed by a 30 minute wash in the buffer.

Claim 36 and 37 (canceled)

Claim 38 (currently amended) The oligonucleotide probe of claims [[37]] 34 or 35, wherein the sequence is at least 50 bases.

Claim 39 (currently amended) The oligonucleotide probe of claims 34 or 35, wherein the oligonucleotide probe is [[20]] 30 to 50 nucleotides in length.

Claim 40 (currently amended): A composition comprising an [[The]] oligonucleotide probe consisting of the oligonucleotide probe of claims 34 or 35, ~~wherein the probe further comprises~~ and a detectable label.

Claim 41 (previously presented): The oligonucleotide probe of claim 40, wherein the detectable label comprises an isotopic label or a non-isotopic label.

Claim 42 (previously presented): The oligonucleotide probe of claim 41, wherein the non-isotopic label comprises a fluorescent molecule, a chemiluminescent molecule, an enzyme, a cofactor, an enzyme substrate or a hapten.

43. (canceled)

44. (previously presented) An oligonucleotide probe consisting of at least [[15]] 20 contiguous nucleotides of a polynucleotide having a sequence as set forth in SEQ ID NO:23, or a sequence complementary thereto.

45. (previously presented) An oligonucleotide probe consisting of at least 30 contiguous nucleotides of a polynucleotide having a sequence as set forth in SEQ ID NO:23, or a sequence complementary thereto.

46. (previously presented) An oligonucleotide probe consisting of at least 50 contiguous nucleotides of a polynucleotide having a sequence as set forth in SEQ ID NO:23, or a sequence complementary thereto.

Claim 47 (previously presented): A composition comprising an [[The]] oligonucleotide probe consisting of the oligonucleotide probe of claim 44, ~~wherein the probe further comprises~~ and a detectable label.

Claim 48 (previously presented) An oligonucleotide probe comprising a nucleic acid sequence which [[specifically binds]] hybridizes under stringent conditions to a nucleic acid having 90% sequence identity to SEQ ID NO:23 or a sequence fully complementary thereto to

form a detectable target probe duplex, wherein the nucleic acid having 90% identity to SEQ ID NO:23 has an esterase activity.

49. (previously presented) The oligonucleotide probe of claim 48, wherein the nucleic acid has 95% sequence identity to SEQ ID NO:23.

50. (previously presented) The oligonucleotide probe of claim 48, wherein the oligonucleotide probe further comprises a detectable label.

51. (withdrawn) A method for amplifying a nucleic acid comprising using an oligonucleotide probe as set forth in claim 26, claim 27 or claim 44 as an amplification primer.

52. (previously presented) An amplification primer comprising an oligonucleotide as set forth in claim 26, claim 27 or claim 44.

53. (previously presented) A diagnostic probe comprising an oligonucleotide as set forth in claim 26, claim 27 or claim 44.